Air Force Terminals

Air Force MILSATCOM Terminal Program Office (MTPO)







Mission

The MILSATCOM Terminal Programs Office (MTPO) equips the President, Secretary of Defense and combat forces of all Services with survivable, worldwide, rapid communications for all levels of conflict. It develops, acquires, and operationally deploys communication terminals synchronized to support satellite weapon system operations, and provides support for 16,000 aircraft, ship, mobile, and fixed site terminals.

Description

The MTPO is responsible for the acquisition of satellite communication terminals in ultra, super, and extremely high frequency (UHF, SHF, and EHF) bands. Operating as a component of the MILSATCOM Joint Program Office (MJPO), the MTPO's terminals include airborne, ground fixed, transportable, and transit case configurations and support the communications needs of the President and Secretary of Defense, the Joint Staff, Combatant Commanders, and Services.

Terminals in the narrowband frequency range provide worldwide, assured, low data rate (up to 56 Kbps) satellite communication. These terminals incorporate the Joint Staff directed Demand Assigned Multiple Access (DAMA) functionality, which breaks the waveform into time slots to maximize utilization. The Air Force is currently preparing to field the new Airborne Integrated Terminal Group (AITG), which provides communications for combat search and rescue teams, bombers, reconnaissance, surveillance, targeting, and other missions. The MTPO is also responsible for the procurement and fielding of the Army developed, "man-packable" Spitfire Radio and the U.S. Special Operations Command Multiband, Multimission Radio for Air Force users, in support of intelligence gathering, counter drug operations, reconnaissance, weather updates, and other missions.

Wideband terminals provide global communications with high data rates (up to 50 Mbps). The program office is currently developing the Ground Multiband Terminal (GMT), a quad-band (C, X, Ku, and Ka) terminal that provides the warfighter with flexible, integrated tactical communications. The MTPO is also

responsible for the installation, maintenance, upgrade, and removal of the Army-developed Defense Satellite Communications System (DSCS) terminals at Air Force sites, which provide worldwide, wideband satellite communications for strategic and tactical command, control, communications, and intelligence users.

EHF, or protected, terminals provide worldwide jamresistant, survivable communications, which ensure low probability of intercept/detection communications for National and strategic leadership. These terminals operate with a number of EHF-capable satellites, but the key satellites are the Milstar and the upcoming Advanced EHF (AEHF) constellations. EHF terminal programs include the current Milstar Command Post Terminal (CPT), which supports global command and control of strategic forces, and the Family of Advanced Beyond-Line-of-Sight Terminals (FAB-T), scheduled for contract award in FY02. FAB-T will replace CPT and provide strategic and tactical communications for aircraft. The MTPO is also responsible for the procurement, fielding, and unit training for the Armydeveloped Secure Mobile Anti-jam Reliable Tactical Terminal (SMART-T), which is being acquired for Air Force units.

The MTPO is developing terminals for laser and wideband communications to support the new DoD Transformation Communications initiative. New Laser Communications terminals (up to 1.2Gbps) will be required to support Beyond Line-of-Sight (BLOS) and Line-of-Sight (LOS) communications of Intelligence, Surveillance, and Reconnaissance (ISR) data. Wideband terminals (up to 274Mbps) will be required to provide a robust, secure 2-way Ka-band satellite communications capability for future air and ground requirements.

Providing Beyond Line-of-Sight Capability for the Global Information Grid





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